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## Event Highlights



## K&T Dairy LLC

*Keith & Brenda Vosters & Troy & Jayne Vosters  
N2518 Holland Road, Freedom, WI*

**Sunday, June 12 | 8:00 am - 12:00 pm**

Help kick off June Dairy month with the 30<sup>th</sup> Annual Breakfast on the Farm hosted by K&T Dairy, LLC. The event will feature a delicious dairy breakfast, pedal tractor pull, live music by KNX, children's activities including inflatables and face painting, Fairest of the Fair announcement, farm tours, antique tractors, wagon rides, and more.

**NEW** this year is the **Choose to Move 5K Run/Walk**. Registration begins at 6:00 am with the run/walk starting at 7:00 am.

## Tractor & Machinery Certification Course

**June 13-17 | 9:00 am - 3:30 pm | Ages 12-15  
Fox Valley Technical College Agriculture Center**

This course is taught by certified instructors to provide youth with the means to develop positive attitudes toward tractor and machinery safety, basic principles of safety, increase knowledge and ability, and to be able to identify and correct agriculture work hazards.

**To Register Enrollment Services 920-735-5645 Reference Course #70330**

*Download Brochure for more information*

### Purchase Advance Tickets

- Don's Quality Market  
147 W Wisconsin St, Seymour
- GreenStone FCS  
340 Patriot Dr, Little Chute
- Wolf River Community Bank  
• 1008 N Shawano St  
New London
- 309 East Main St | Hortonville
- 6490 Greenville Dr | Greenville
- Simon's Cheese (June 6-11)  
2735 Freedom Rd, Appleton

Ticket	Advance	Day Of
Adult	\$6.00	\$7.00
Child (5-10)	\$4.00	\$4.00
Child (4 & under)	Free	Free

*More information at  
[OutagamieDairyPromotion.com](http://OutagamieDairyPromotion.com)  
[Event Details on Facebook](#)*

**Become a Sponsor/Volunteer  
Kelly at 920-378-4744**



# Special funding for Landowners and Agricultural Producers

**SIGN UP DEADLINE is June 10, 2016**



USDA Natural Resources Conservation Service (NRCS) has announced special funding opportunities for Landowners & Agricultural Producers interested in planting Cover Crops and Monarch Butterfly Habitat through the Environmental Quality Incentives (EQIP) and additional practices under the Great Lakes Restoration Initiatives EQIP Programs.

## Great Lakes Restoration Initiative Program (GLRI)

The Lower Fox Watershed encompasses portions of Brown, Outagamie, Calumet, Winnebago, and Manitowoc County. Over the past 3 years, financial assistance has been provided to farmers in the watershed to install conservation practices which reduce and control phosphorus runoff. A watershed map showing eligible area boundaries can be found on the WI NRCS website. The GLRI area is focused on reducing nonpoint source phosphorus runoff from fields and pastures by installing conservation practices such as manure storage, grassed waterways, No-Till, filter strips, grazing and other additional practices.

## Cover Crop Program

Through this program, NRCS offers financial & technical incentives for farmers willing to add cover crops to their crop rotation. While NRCS is recommending farmers check with their crop insurance agent before committing to cover crops, most farmers know that cover crops do more than just provide cover. They are highly effective in reducing soil erosion, suppressing weeds, building organic matter and improving soil health. Typically established in the fall, cover crops reduce risk of runoff, can provide additional nutrients to future crops, sequester carbon, and improve soil structure, which in turn, provides improved infiltration and nutrient availability.

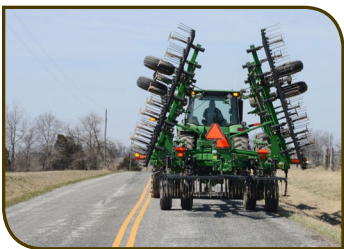
## Monarch Butterfly Program

Through this program, NRCS will provide financial & technical assistance for planting milkweed (which is the sole source of food for Monarch caterpillars) and high pollen plants that will provide food and habit for the Monarch Butterfly while providing other benefits to the environment and other pollinators such as the Honey Bee, whose population has been significantly declining over the past several years.

Complete an application before the June 10<sup>th</sup> deadline to be considered for funding. Applications will be accepted at the NRCS office:

USDA Service Center  
3369 W. Brewster Street  
Appleton, WI 54914

You may contact the office by calling (920) 733-1575 ext 3, email [lynn.szulczewski@wi.usda.gov](mailto:lynn.szulczewski@wi.usda.gov) or visit our website at [www.wi.nrcs.usda.gov](http://www.wi.nrcs.usda.gov) to learn more about the programs.



## Road Ready for 2016

**Source:** <http://fyi.uwex.edu/ioh>

Spring has arrived! Soon all types of farm machinery will be traveling Wisconsin highways. As work continues to update Wisconsin laws related to operating agricultural vehicles on the highway, there are some new changes for 2016. In addition, **new lighting and marking requirements** (<http://fyi.uwex.edu/ioh/ioh/lights-and-marking/>) for Implements of Husbandry (IoH) were effective of November 1, 2015.

### Now is a good time to plan your routes. Factors to consider are:

- Has there been a change to the local option for weight requirements?  
Check out the **2016 IoH/Ag CMV Requirement map** at (<https://datcpgis.wi.gov/ioH>)
- Purchased new machinery and will it need to operate by **permit** (<http://fyi.uwex.edu/ioh/permits-2/>) or excess weight and length?
- Changed from a towed TMR or self-unloading forage wagon to a truck-mounted vehicle but unsure if the vehicle is an Ag CMV or a CMV. <http://fyi.uwex.edu/ioh/agcmv/>
- Need to train employees about operating on highway? <http://fyi.uwex.edu/ioh/rules-of-the-road-2/>

As you change oil, check tires and hitch up field equipment, take time to be road ready and legal in 2016. Safe travels!



## What is Standing Alfalfa Worth in 2016?

Greg Blonde, Waupaca County  
UW-Extension Agent. April 2016.

One of the challenges in coming up with a value for standing hay is the lack of daily commodity market pricing like corn and soybeans. Another challenge this year is the significant drop in hay price, in some cases almost half of what it was going for just a few years ago. So the price for standing hay last year might not be appropriate this year. Here is one example for pricing standing hay in 2016.

Assuming a four (4.0) ton dry matter (DM) yield/acre for the entire year of dairy quality alfalfa hay ranging from \$100 to \$150/ton baled (\$0.06 to \$0.09/lb DM) with half the value going to the land owner for input costs (land, taxes, seed, chemical and fertilizer), and half the value credited to the buyer for harvesting, field loss and weather risk, standing value for this alfalfa field for the entire season would be \$230 to \$360/acre.

Using a three cut (43% / 31% / 26%) or four cut (36% / 25% / 21% / 18%) harvest schedule, the following price range (rounded to the nearest \$5) may offer a starting point for buyers and sellers to negotiate a sale of high quality standing alfalfa in 2016:

	4 cuts	3 cuts
1st crops	\$100-\$155/a	\$85-\$130/a
2nd crop	\$70-\$110/a	\$60-\$90/a
3rd crop	\$60-\$95/a	\$50-\$75/a
4th crop		\$40-\$65/a

To help farmers and landowners better evaluate their pricing options, **Greg Blonde, UW-Extension Agriculture Agent** released a FREE Smartphone app last year for pricing standing hay. With over a thousand users since last spring, the app provides easy access to the current baled hay market for reference prices, and calculates standing value per acre for each cutting based on projected annual yield and harvest costs.



The app is free and can be downloaded on all Android smart phones and tablets through the Google Play store (search for Hay Pricing) or by going to: <https://goo.gl/dJ1K5U>

*Keep in mind ownership costs can run \$300-400/acre when considering lost rent, establishment costs and top-dress fertilizer to maintain soil fertility. That's why the same price is not always the right price for everyone. As the old saying goes "a fair price is whatever a willing seller and an able buyer can agree on".*



## PEAQ and Alfalfa Scissors Clip Project for 2016 Growing Season

Kevin Jarek, Outagamie Forage Council

More than 1.25 million acres of alfalfa are grown across the state of Wisconsin each year. Here in Outagamie County farmers grow approximately 50,000 acres of alfalfa annually.

Average production for the season is 4-5 tons of dry matter per acre. One ton of high quality alfalfa currently sells for just under \$200/ton. First cutting on a four-cut system on this crop produces about 36% of the total yield for the entire season; so, maximizing yield and quality is a must if producers expect their dairy herds to maintain high production levels all year long.

The Outagamie Forage Council will once again be providing Predictive Equations for Alfalfa Quality (PEAQ) stick measurements and alfalfa scissors clip information to the general public beginning in early to mid-May. The UW-Extension office will work with area professional crop consultants, seed dealers, agronomists, and farmers across the county to make sure we have representative data covering all of Outagamie producers.

Samples will be taken each Monday and Thursday until first crop harvest. The results will be available on Tuesday and Friday via the Outagamie County UW-Extension Alfalfa Scissors Clip Hotline by dialing 920-832-4769 or on the web at [www.uwex.edu/ces/ag/scissorsclip](http://www.uwex.edu/ces/ag/scissorsclip).

Special thanks to the following producers and consultants who are participating:

- **Sugar Creek Farm | New London**  
*collected by Knutzen Crop Consulting*
- **Seven Oaks Dairy/Jon Lamers Farm | Kaukauna**  
*collected by Kevin Naze*
- **Ben and Karen Muenster Farm | Seymour**  
*collected by Tilth Agronomy*
- **Larrand Dairy Farm | Freedom**  
*collected by Tilth Agronomy*



Outagamie Forage Council



Midwest Forage Association



# Hay prices weaker in parts of the Upper Midwest

**Fae Holin, Communication Specialist**

April 28, 2016 | <http://www.midwestforage.org/non-researchpdf/206.pdf>

Small square bale prices across the Midwest dropped an average \$36/ton from those reported April 11, according to the Hay Market Demand and Price Report for the Upper Midwest, posted April 25. Overall hay prices were also weaker “Spring field work and fewer markets holding hay auctions may have contributed to the decrease,” says Richard Halopka, the University of Wisconsin Extension crops and soils agent for Clark County who compiles the report. He adds that local hay markets had good supply but little demand.

Prices for Upper Midwestern prime alfalfa hay (greater than 151 RFV/RFQ) averaged \$209/ton for small squares, \$166/ton for large squares, and \$140/ton for large rounds, according to Halopka’s report. Compared to his April 11 summary, prices were down from \$245 to \$209/ton for small squares and down by \$18/ton for alfalfa large squares and large rounds.

**Grade 1 hay (125-150 RFV/RFQ)** experienced a pricedrop for small square bales –\$142/ton as compared to the April 11 average price of \$182/ton. But there were slight price increases for large square bales –from \$132/ton to \$137/ton –and for large rounds- from \$97/ton to \$106/ton.

**Grade 2 hay (103-124 RFV/RFQ)** brought an average of \$94/ton for large squares and \$77/ton for large rounds

**Grade 3 hay (87 to 102 RFV/RFQ)** sold for \$79/ton for large squares and \$59/ton for large rounds. There were no reported sales of small square bales for either of those two hay grades.

Halopka reports that Wisconsin’s hay crop in general seems to have made it through the winter and that, with spring moisture, there should be an adequate supply of hay this year. Prices were steady but supply exceeded demand at most auctions.

At Reynold’s Livestock, Dodgeville, first-crop alfalfa large squares averaged \$82.50-90/ton at the April 23 auction, and first crop large rounds sold for \$45-77.50/ton. Second-crop alfalfa brought \$185/ton for small squares, \$115-132.50/ton for large squares, and \$70/ton for large rounds. Third-crop alfalfa ranged from \$75/ton to \$157.50/ton in large squares and from \$45 to \$70/ton in large rounds. Grass large rounds averaged \$62.50-72.50/ton.

The April 25 auction at Fennimore Livestock Exchange, Fennimore, brought alfalfa dairy-hay prices of \$100-110//ton for large squares, \$80-90/ton for large rounds, and \$3/bale for small squares. Dry-cow/ beef-cow-quality hay averaged \$30-55/ton.

People were “ready to buy” at the April 27 auction at Tim Slack Auction & Realty, Lancaster. Large-square bale sales were steady and large rounds were \$10/ton higher, the auction reports. Average premium alfalfa prices were \$205/ton for large squares. Good-quality large squares averaged \$117.50-145/ton; good-quality large rounds, \$95-110/ton. Fair-quality alfalfa hay averaged \$80-100/ton for large squares and \$60-75/ton for large rounds. Wrapped large squares brought \$105-157.50/ton and wrapped large rounds, \$40-50/ton.



# Glyphosate-Resistant Weeds Spreading throughout Wisconsin and Minnesota.

Mark Renz, Extension Weed Specialist, University of Wisconsin<sup>1</sup>

April 28, 2016 | <http://www.midwestforage.org/non-researchpdf/204.pdf>

While herbicide-resistant weeds are not new to Wisconsin and Minnesota, a new wave of weed populations resistant to glyphosate and other herbicide modes of action are being discovered in these two states. Palmer amaranth and common waterhemp are of greatest concern. These species have been observed to have spread rapidly throughout the Southern and lower Midwestern states and become the dominant weed species.

This change in weed species composition has resulted in dramatic increases in weed management costs and/or large losses in yield. In this article we will highlight the current known distribution of these two glyphosate-resistant weeds in Wisconsin and Minnesota as well as offer tips on how to identify these species.

## Palmer amaranth | Figure 1

Information on distribution is limited in both states. We have found it present in southern Wisconsin (Grant, Iowa, Dane, and Sauk counties), and it appears to be spreading north. While not all of the populations discovered in Wisconsin were resistant to glyphosate, two populations have been confirmed resistant, with one displaying a greater than 18-fold level of resistance to susceptible populations

In Minnesota, we have no documented observations, but it has been found in nearby counties in Iowa. Minnesota has made Palmer amaranth a regulated species and designated it as a prohibited species, which means all above- and below-ground parts of the plant must be destroyed and no transportation, propagation, or sale of these plants is allowed.

## Common waterhemp | Figure 2

Presence has been increasing in both states over the past several years. It is present in nearly all of the counties of southern and central Wisconsin. We have also seen populations in the western counties along the Mississippi River up to Burnett County.

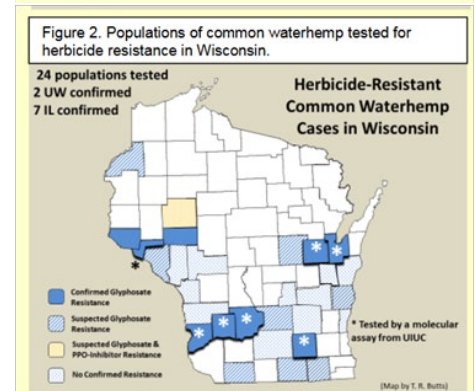
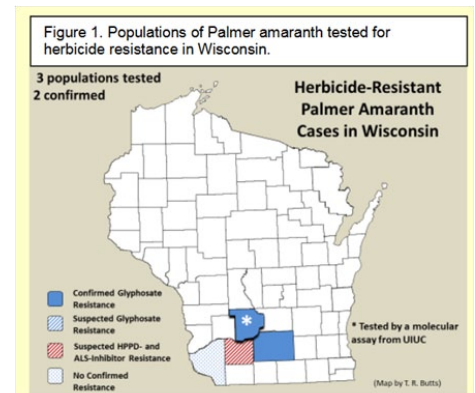
A similar trend is being seen in Minnesota, with populations widely found in the western portion of the state and also populations expanding along the Minnesota-North Dakota border. While not all of these populations have been found to be resistant, a substantial proportion have been reported as resistant to glyphosate, and many are currently being evaluated. If you find common waterhemp and suspect it is resistant to glyphosate, a rapid assay is available for \$50 from the Illinois Plant Clinic. **Click more on herbicide-resistance testing**

## Identification and Biology

These species are in the same genus as pigweeds and can be easily confused with redroot and smooth pigweed, especially before they flower. It is important to differentiate Palmer amaranth and common waterhemp from these species for two reasons:

- The potential for Palmer amaranth and common waterhemp to be resistant to glyphosate and other herbicide modes of action is much greater than it is for the other pigweed species. Glyphosate-resistant populations are documented to be present in 18 (Palmer) and 25 (waterhemp) states in the U.S. (with greater than five populations resistant to multiple modes of action). In contrast, we have no documented glyphosate-resistant populations of redroot or smooth pigweed (click here for more data).
- Management options differ for these species (Palmer and waterhemp) as they can grow faster and emerge later into the growing season than they do for the more common pigweeds. Their management can often be more costly and may cause greater crop injury. Fortunately, several great resources on identification are available (see below). But one of the easiest traits to look at is whether hairs are present on the stem. Both waterhemp and Palmer amaranth have no hairs, while smooth pigweeds have a few hairs and redroot pigweed have many hairs present. While this doesn't differentiate between the two glyphosate-resistant species, it allows for narrowing to these species of high concern.

If you think you see a population of one of these species, we suggest you report it to your local Extension agent, especially if you think it is resistant to herbicides. In Wisconsin we will be working with Wisconsin's Department of Trade and Consumer Protection (DATCP) to monitor presence and level of infestation in 500 fields throughout the state. Hopefully, this will give us a better picture of the current distribution and impact from these species.



<sup>1</sup> Jeff Gunsolus and Jeff Stachler, University of Minnesota, provided Minnesota distribution data. Wisconsin herbicide screening information was provided by Dave Stoltenberg, University of Wisconsin-Madison.

# Corn Agronomy

It's by an agronomist and is about corn.

April 14, 2016 | <http://goo.gl/3eIFrp>

I have been receiving many questions this year regarding the “correct” plant density for corn. Growers are concerned about 2016 production economics and one input they are looking at is seeding costs related to plant density in the field. The optimum plant density is influenced by both seed cost and grain price. As seed costs increase and/or grain price decreases the “correct” plant density shifts lower.

Every year since 1982, plant densities have been increasing by about 300 plants/A. Seed costs during the 1980s were about \$20/A and plant densities were a little over 20,000 plants/A. Today seed costs are over \$100/A with USDA-NASS plant densities around 30,000 plants/A. Today a typical 80,000 (80K) count bag of seed costs \$300/bag, so each 1000 plant/A adjustment means \$3.75/A.

The best way to approach the decision to determine the “correct” plant density for a field is to find the plant density where the maximum yield (MYPD) occurs. Figure 1 shows 10-yr of data from Arlington experiments that tested corn grain and silage response to harvested plant density. In this example, the grain MYPD occurs at about 39K. The economic optimum (EOPD) is about 4K to 5K less than the MYPD. However, you can be within 95% of MY at about 29K indicating how “broad shouldered” the plant density response is (a 10K swing = \$37.50/A at \$300/80K bag). When the cost of production and ultimate economics are not favorable like this year, you may want to think hard about going after MY, but make sure you are above 29K.

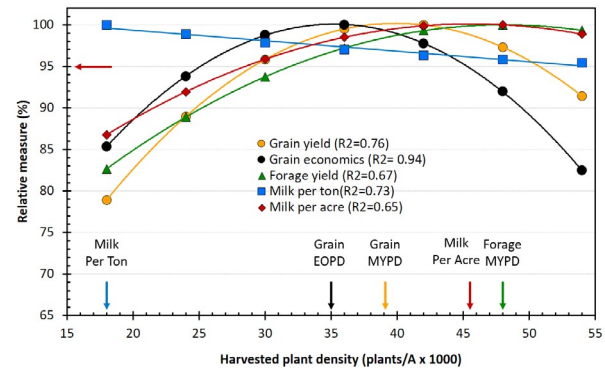


Figure 1. Relationship between corn plant density and grain yield, economic optimum, forage yield, Milk/Ton, and Milk/Acre. Data are derived from Arlington during 2005 to 2014. (click to enlarge)

On the silage side it is more difficult to find the EOPD. I have always approached the silage EOPD from the Milk per Acre measure, but that does not take into account seed costs. So in the attached example, Milk per Acre is maximized at 45K. I would think that you need to subtract 4K to 5K to get at the silage EOPD. It will fluctuate widely with milk price and given the outlook for this year you may want to lower the plant density 8K to 10K. Again you are still within 95% of maximum Milk per Acre above 29K.

Every hybrid and every field likely has different MYPD and EOPD values. Breeders are constantly improving standability of corn hybrids, so the MYPD has been increasing every year by about 400 plants/A. In addition, environment and management style will influence these values (i.e. drought versus a normal year). This relationship indicates the ability of the corn plant to compensate for discrepancies in plant density, but it is highly influenced by grain/silage/milk prices and input costs. It also says a few things about the implications of variable rate seeding.

## Using High-Input Systems for Soybean Management

United Soybean Board

Increased soybean commodity prices in the last 10 years have generated interest in developing high-input systems to increase yield. However, little peer-reviewed information exists about the effects of input-intensive, high-yield management on soybean yield and profitability, as well as their interactions with basic agronomic practices.

In 2009, the United Soybean Board funded a study called the “Kitchen Sink Project” to begin examining some of these questions. The research was conducted in six states (Arkansas, Iowa, Kentucky, Louisiana, Michigan, and Minnesota) from 2009 to 2011.

While there were several projects within this study, one of the main projects focused on row spacing and a “kitchen sink” approach to input use. The “kitchen sink” treatment included additional soil-applied fertilizer, seed treatment fungicides and insecticide, seed-applied inoculant, foliar fertilizer, and foliar fungicide. Some of the highlights from this particular study included:

- Narrow row spacing ( $\leq 20$  in) produced the highest yields.
- Wide row spacing with the “kitchen sink” treatment yielded similar to narrow row spacing without the “kitchen sink” treatment.
- Foliar fungicide was the input that gave the most consistent positive yield response.

**Read the full article**

More information regarding the “Kitchen Sink Project” can be found at <http://www.usb-extremebeans.com>.

